

CLAIM SET AS AMENDED

Claims 1-3 (Canceled).

4. (Original) A digital data recording and reproducing system comprising:

a receiver for receiving transmitted digital data including a plurality of multiplexed programs consisting of video, audio, data and so forth which are subjected to compression;

a recorder for storing received digital data, and for reproducing recorded digital data;

a decoder for decoding digital data reproduced by said recorder to restore the programs; and

a discontinuity detector for detecting a discontinuity between the programs while said decoder is decoding the compressed digital data of the programs,

wherein said discontinuity detector restarts said decoder upon detecting the discontinuity between the programs.

5. (Original) The digital data recording and reproducing system according to claim 4, wherein said discontinuity detector detects the discontinuity between the programs by using information specified in IEC/ISO 13818.

6. (Original) The digital data recording and reproducing system according to claim 5, wherein said discontinuity detector detects the discontinuity between the programs by using program_number specified in ISO/IEC 13818 as information for indicating a number of each of the programs.

7. (Original) The digital data recording and reproducing system according to claim 5, wherein said discontinuity detector utilizes a continuity_counter that is specified in ISO/IEC 13818 and increments with each transport packet having a corresponding PID (Packet Identification) in a transport packet layer, and detects the discontinuity between the programs in response to a change in the increment of the continuity_counter.

8. (Original) The digital data recording and reproducing system according to claim 5, wherein said discontinuity detector utilizes a Decoding Time Stamp specified in ISO/IEC 13818 for indicating a time when each access unit is to be decoded, and detects the discontinuity between the programs in response to a time difference between the Decoding Time Stamp.

9. (Original) The digital data recording and reproducing system according to claim 5, wherein said discontinuity detector utilizes a vbv_delay in a picture header, and detects the discontinuity

between the programs by comparing an amount of data to be stored in a buffer calculated from the vbv_delay with an amount of data of the program actually stored in the buffer before decoding.

10. (Original) The digital data recording and reproducing system according to claim 5, wherein said discontinuity detector utilizes at least two of a program_number, a continuity_counter, Decoding Time Stamp and a vbv_delay in a picture header, which are specified in ISO/IEC 13818 for indicating a number of each program, for incrementing with each transport packet with a corresponding PID in a transport packet layer, for decoding time of each access unit and for indicating an amount of time a picture header should reside in a VBV buffer before decoding, respectively.

11. (Original) The digital data recording and reproducing system according to claim 4, further comprising a program switching signal addition section for recording, when a program to be stored is switched in response to a user instruction, not only the program itself, but also a program switching signal indicating the program switching, wherein said discontinuity detector decides that the program discontinuity takes place when it detects the program switching signal.

12. (Original) The digital data recording and reproducing system

according to claim 4, wherein said discontinuity detector outputs fixed data when detecting the discontinuity between the programs.

13. (New) A digital data recording and reproducing system, comprising:

a receiver for receiving digital data including a plurality of multiplexed programs;

a recorder for storing and reproducing said received digital data;

a decoder for decoding digital data reproduced by said recorder to restore the programs; and

a detector for detecting discontinuity between the programs during said decoding to restart the decoder.

14. (New) A method for recording and reproducing digital data, comprising:

transmitting digital data to a receiver including a plurality of multiplexed programs;

providing a recorder for storing and reproducing said transmitted digital data;

providing a decoder for decoding digital data reproduced by said recorder to restore the programs; and

providing a detector for detecting discontinuity between the programs during said decoding to restart the decoder.